RS232
CENTRONICS
CONVERTER

USER'S MANUAL

SXP-320A
SXP-325A

Read this guide thoroughly and follow the installation and operation procedures carefully to prevent any damage to the hub and/or any of the devices it connects to.

This package contains:

- 1 Bidirectional Serial/Parallel Converter (SXP-320A or SXP-325A)
- 1 AC 9V 200mA Power Adapter
- 1 User Manual

©Copyright 1999 ATEN® International Co., Ltd.
Manual Part NO. PAPE -1145-100
Printed in Taiwan 06/1999

All brand names and trademarks are the registered property of their respective owners.

Table of Contents

Overview
Features
Installation
  Default Configuration
  DIP Switch Settings
  Cabling
Operation
Appendix
  Troubleshooting
  Specifications
  RS-232C Interface Specification
  Centronics Interface Specification
  Centronics Interface Timing Chart
  Preventing Radio & TV Interference

Overview

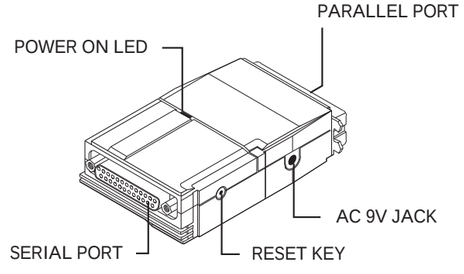
The SXP-320A / SXP-325A are interface converters that allow Centronics and RS-232 devices to communicate with each other (a computer with an RS-232 output to a Centronics printer, for example).

Both units are bidirectional enabling you to convert from serial to parallel or parallel to serial. The primary difference between them is that the SXP-325A is configured with 512 KB of memory allowing it to serve as a printer buffer, whereas the SXP-320A has no memory.

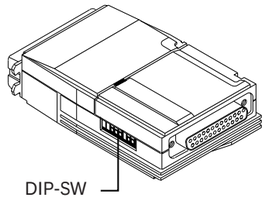
These two way converters provide a DB-25 RS-232C (DCE) compatible connector, and a C-36 Centronics connector. The serial baud rate is from 1200 to 115200 bps. (selectable by DIP Switch). The parallel interface speed for the (non-buffered) SXP-320A is 11.52 KB/sec; for the (buffered) SXP-325A, it is 1.5 MB/sec.

The units support both hardware and software (XON/XOFF) handshaking. Setup is extremely easy. All that is involved is setting the DIP Switch and connecting the cables.

Front View



Rear View



Features

- DIP Switch Sets Data Direction
- Built In Buffer for Efficient Operation (SXP-325A)
- Both Hardware and XON/XOFF Handshaking
- Easy Installation
- Compact Size

Installation

Switch Configuration Overview:

The SXP-320A/325A is configured by setting an eight segment DIP Switch as follows:

Switch	Purpose
1 2 3	Baud rate setting
4	Handshake setting
5	Data and Stop Bits setting
6 7	Parity setting
8	Conversion Direction setting

An explanation of each DIP Switch setting is given below.

Note: 1. When the segment is set in the direction of the arrow, it is ON.
2. In each table, the default setting is highlighted

Setting the Switches

Baud Rate:

The baud rate is set with DIP Switch segments 1 - 3, as shown in the table, below

DIP Switch Segment			Baud Rate (bits per second)
1	2	3	
ON	ON	ON	1200
ON	ON	OFF	2400
ON	OFF	ON	9600
ON	OFF	OFF	14400
OFF	ON	ON	19200
OFF	ON	OFF	38400
OFF	OFF	ON	57600
OFF	OFF	OFF	115200

Handshake:

DIP Switch Segment	Handshake
4	
ON	XON/XOFF
OFF	Hardware

Data and Stop Bits:

DIP Switch Segment	Data Bits	Stop Bits
5		
ON	7	2
OFF	8	1

Parity:

DIP Switch Segment		Parity
6	7	
ON	Either	Parity Inhibit
OFF	ON	Even Parity
OFF	OFF	Odd Parity

Conversion Direction:

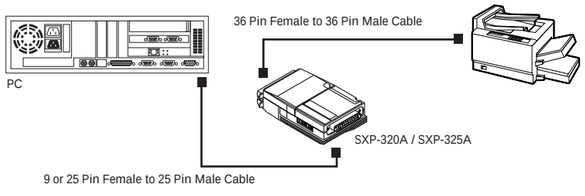
DIP Switch Segment	Conversion Direction
8	
ON	Parallel to Serial
OFF	Serial to Parallel

Cabling

Serial to Parallel:

When performing a Serial to Parallel interface conversion:

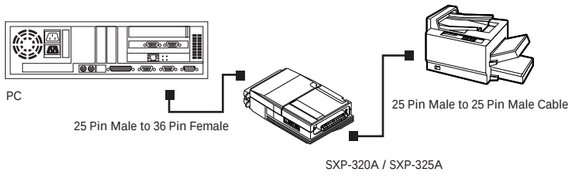
1. Plug the female end of a 25/9-pin to 25/9-pin male/female serial cable into the PC's serial port
2. Plug the male end of the 25-pin to 25-pin male/female serial cable into the SXP-320A/SXP-325A's serial connector
3. Plug the female end of a C-36 to C-36 male/female printer cable into the SXP-320A/SXP-325A's printer connector
4. Plug the male end of the C-36 to C-36 male/female printer cable into the printer.
   Note: If your serial cable is long enough, you can plug the SXP-320A/SXP-325A directly into the printer, without the need for a printer cable.
5. Plug the Power Adapter into an AC source; plug the Power Adapter cable into the SXP-320A/SXP-325A's power jack.



Parallel to Serial:

When performing a Parallel to Serial interface conversion:

1. Plug the male end of a 25-pin (male) to C-36 (female) printer cable into the PC's parallel port
2. Plug the female end of the 25-pin to C-36 male/female printer cable into the SXP-320A/SXP-325A's Centronics connector
3. Plug the male end of a 25-pin to 25-pin male/female serial cable into the SXP-320A/SXP-325A's serial connector
4. Plug the female end of the 25-pin to 25-pin male/female serial cable into the printer's serial port
5. Plug the Power Adapter into an AC source; plug the Power Adapter cable into the SXP-320A/SXP-325A's power jack.



Serial Port Cabling

Device Connector's Pin #				Cables		SXP-320A / SXP-325A
DCE DB-9	DTE DB-9	DCE DB-25	DTE DB-25	a 25-pin/25-pin cable or a 9-pin/25-pin cable		DCE DB-25
2	3	3	2	Tx ---------►	Rx	2
3	2	2	3	Rx ◄---------	Tx	3
8	7	5	4	RTS ---------►	CTS	4
7	8	4	5	CTS ◄---------	RTS	5
4	6	20	6	DSR ◄---------	DTR	6
6	4	6	20	DTR ---------►	DSR	20
5	5	7	7	GND ----------	GND	7

Parallel Port Cabling

Device's Pin #		a 25-pin/36-pinCables or a 36-pin/36-pin cable	SXP-320A / SXP-325A
DB-25	C-36		C-36
1	1	STROBE	1
2-9	2-9	D0-D7	2-9
10	10	ACK	10
11	11	BUSY	11
12	12	PE	12
13	13	SLCT	13
14	14	AUTOFEED-XT	14
15	32	ERROR	32
16	31	INIT	31
17	36	SLCT-IN	36
18-25	19-30	GND	19-30